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A Yardstick for School Lunches

Prepared by

THE INTERAGENCY COMMITTEE ON SCHOOL LUNCHES

Composed of Representatives of the

FEDERAL SECURITY AGENCY

U. S. Children's Bureau
U. S. Office of Education
U. S. Public Health Service

U. S. DEPARTMENT OF AGRICULTURE

Bureau of Human Nutrition and Home
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Foreword

WITH THE GROWTH of community interest in the school lunch program, requests have been received for some sort of guide which local groups can use to determine how well their own school lunch programs are operated. Many persons report a general desire in their communities to help with the program but there is no definite idea how to go about it, and for lack of a proper plan nothing is done. Above all, every effort related to the health and well-being of children should be made to count to its maximum capacity.

It is desired that the plan presented in this pamphlet be of the greatest possible value to those who find occasion to use it. The Cooperating Committee on School Lunches,¹ which has been responsible for its preparation, has consulted with many persons on Federal, State, and local levels who have had long experience in school lunch programs in regard to the items to be presented. Many capable persons have studied the form carefully. Suggestions from many sources have been included. The document was produced in mimeographed form and tested in a few States. It has been revised in light of the experience thus gained. The committee feels, therefore, that it represents a composite of the best thoughts of a large number of people who are working in various capacities in connection with school lunch programs.

The purpose of this pamphlet, then, is to serve as a guide to local groups wishing to bring about in the most efficient manner a well-operated school lunch program in their own community.

John H. Studdaker

U. S. Commissioner of Education.

¹ This publication was prepared in 1944 by a committee known at that time as the Cooperating Committee on School Lunches and composed of representatives of the following agencies: Federal Security Agency, Federal Works Agency, Office of Civilian Defense, Office of Price Administration, U. S. Department of Agriculture, U. S. Department of Labor, American National Red Cross, and the National Congress of Parents and Teachers. It was issued as Pamphlet No. 4 of the Nutrition Education Series of the U. S. Office of Education, Federal Security Agency.

In 1947, the committee was reorganized and its name was changed to the Inter-Agency Committee on School Lunches. This committee made slight revisions in this publication, which is now reissued by the U. S. Department of Agriculture as PA-50.

Issued August 1944.

Slightly revised, June 1948.

Introduction

What is a school lunch appraisal?

A school lunch appraisal is the process of evaluating a school lunch program.

Why should a school lunch program be appraised or measured?

Since school lunch programs have sprung up all over the country in a mushroomlike growth, communities are realizing they often know too little about how they are operated, or how they should be operated. With increasing emphasis placed on nutrition of children, well-informed persons are eager to be assured that all pupils in the schools are being taught what to eat as well as what to read.

The primary reason, then, for making a school lunch appraisal is to give the community and school an awareness of the existing conditions in the school lunch program in order that necessary improvements and extensions may be assured.

Who should make a school lunch appraisal?

A school lunch appraisal may be suggested by any one person or any group of persons interested in the welfare of the children of the community.

If the appraisal is to be successful, however, it must be carried out by a group of people who represent the major community interests. Only in this way can the community and school become aware of existing conditions.

The consent and cooperation of the school officials and of the persons responsible for the management of the lunchroom in making a school lunch appraisal must be secured in the beginning. Such persons should help in making the appraisal. It is essential for all concerned to be brought along step by step in any changes which may be necessary.

The guidance of a home economist or other professional person in the field of education or in a related field is basic to the success of the appraisal. Other members of the group should include representatives of men's and women's civic clubs, of business, of the school board, of parents interested in the school, and of labor groups; as well as members of the school lunch advisory committee, if one has already been organized.

The number of appraisers will vary, depending on the size of the community. Care should be taken to avoid having people in the group who are unable to think objectively or who are petty in their points of view. It is well to keep in mind that some who are close to the program will find it difficult to be objective in making the appraisal.

What is a school lunch appraisal form?

The school lunch appraisal form presented in this pamphlet is a simple yardstick by which school lunch programs may be measured. It provides one column for recording data on each item to be included in the appraisal and another column for outlining any necessary action to be taken. Space is provided on page 1, of each section, for the recording of the appraisal symbol agreed on for each goal; and on the last page, for a record of accomplishment.

Goals

The "goals" for each item of the school lunch program are stated at the beginning of each section. They represent the standard with which each item of the program being appraised should be compared before the final decision regarding the appraisal symbol is made.

Source material

In each section, following the appraisal form, some source material is provided which suggests what is to be considered, in relation to the information secured and recorded, at the time the final step in the appraisal is being made, namely, the designation of an appropriate symbol of appraisal. This source material represents approved practices in school lunch programs and may serve as a guide in planning such a program.

What phases of the school lunch program should be studied?

The phases of the school lunch program which should be studied include:

1. The physical facilities such as the kitchen, the stove, the sink, the serving area, etc.
2. The operation of the program which includes the work plan, the kinds and amounts of food used, the number of children served, etc.
3. The management of the program which includes the budget plan, the supervision of the program, work standards, etc.
4. School interest and participation.
5. Community interest and participation.

SUGGESTIONS TO LEADERS INITIATING A SCHOOL LUNCH APPRAISAL

The school lunch program in general

The school lunch program is an integral part of the school; therefore, a leader should be familiar with school plans, policies, and laws before taking any step regarding a school lunch appraisal. It should be determined in the beginning that the local school officials are willing to have the appraisal made.

The operation of the school lunch program varies from the serving of milk, fruit, or one hot dish by the teacher with the assistance of the older children in a one-room school to the elaborate and costly cafeteria in many city schools operated either by the school or by a concessionaire on a profit basis. In between these two extremes are many fine programs. Some schools serve all lunches without cost to the pupils, some serve only paid lunches, and some operate under a plan whereby both types of provision are made.

Leadership

A leader works according to a carefully planned program.

A leader does not necessarily perform the most important jobs to be done. A leader delegates responsibility.

A leader gives credit to those people who work with her.

A leader sees to it that persons trained in special fields—such as nutrition, institutional management, and community organization—become members of the leadership group.

A leader is clear and direct in giving necessary instructions.

A leader can go no further nor faster than the majority of the group with which she is working.

Community organizations

A leader should know the different kinds of organized groups already in the local community, the purposes for which they were organized, and the leaders in each group. As a general rule, action should be secured through these already existing agencies rather than through the organization of a new one. However, if a new group must be formed to make the school lunch appraisal, there should be representation from all agencies interested in the school lunch program. Each group should be acquainted, through its representative, with the purpose of the school lunch appraisal and how it is to be carried out.

After the appraisal has been made, each group should receive a report on it and should be encouraged to devote at least one meeting to a discussion of the findings, giving special consideration to how the group can assist in the future support of the program.

A permanent school lunch committee, representative of local community groups, should be organized.

Making the appraisal

A representative group should be selected to make the appraisal. When the group meets, the purpose of the appraisal and how it is to be carried on should be discussed first. It should be determined in the beginning whether the appraisal will be made in one day or whether it will be spread over a number of days. If the program to be studied is extensive, it may be well to take several weeks for the appraisal.

Subcommittees should be appointed to secure and record information on each group of items to be appraised. The subcommittees should study the appraisal form carefully in order to know what

they are to do. Then they should secure the information and enter it on the appraisal form in the designated space.

The group should come together again after all the subcommittees have recorded the complete data and discuss each group of items in relation to the source material presented at the end of each appraisal form.

As each "goal" is evaluated, a symbol of appraisal should be entered in the space provided for this purpose.

If the group believes it is desirable to designate an appraisal symbol for the school lunch program as a whole, numbers may be assigned to each letter as, for example, E-5, S-4, M-3, I-2, F-0. The numbers which represent the symbols may then be added and averaged to determine the overall appraisal symbol. For example, there are 24 goals, the total numerical score of which may be 96. Thus the average numerical score would be 4 or S which would be shown as the appraisal symbol for the total program.

After all items have been evaluated, the group should consider the next steps to be taken.

Long-time plan for study

After the appraisal has been completed, it may be desirable to plan for a series of meetings at which the different sections of the school lunch appraisal may be studied and discussed. Such meetings provide opportunity for outside speakers to tell about the operation of school lunch programs in other schools; for the showing of film strips, photographs, and slides on school lunches; and for further studies and reports on the local situations. Sometimes such meetings lead to an extension of the school lunch appraisal to all schools in the city or county, or to the initiation of new school lunch programs in other locations.

SUGGESTIONS TO APPRAISERS

It should always be remembered that the appraisal is being made of conditions, not of people who make the conditions, over which they oftentimes do not have entire control.

Directions for securing information

Three methods may be used for securing information concerning the school lunch program:

Observing—The best way to find out about the school lunch program is to visit the lunchroom. Look over the space, the equipment, and the storage unit. Watch the workers while they prepare the meal. Observe the children while they are being served and while they eat.

Studying records—Ask to see copies of the menus and the work plan. Study the records which show how much the food costs and how much the children pay for their meals.

Conferring—Talk with the school officials, with representatives of the school board, and with members of the advisory committee or other participating groups.

Directions for recording information

Brevity—The space provided for the recording of information is small but adequate. In many instances the information may be recorded by a number or by a single word or by a plus or a minus sign. For example, the number of exits may be recorded as "2," the type of stove as "gas," and the degree of cleanliness evidenced by workers in preparing food as "plus" or minus."

Accuracy—Care should be taken to record only reliable information. If there is doubt about the accuracy of any item, it should not be written in the space provided until after a question is raised and the correct answer has been secured. For instance, if it is not known what part of the child's daily food the school lunch is supposed to be, it should not be *assumed* that it is one-third of the child's daily food. If accurate facts cannot be secured, an estimate, based on the information which can be obtained, should be recorded.

Completeness—All items in each group indicated in the appraisal form should be answered if pos-

sible. When the information cannot be secured, this fact should be recorded.

Directions for using the information

After all information has been secured each subcommittee should study that part of the source material at the end of the appraisal form which pertains to the item in order to become thoroughly familiar with accepted standards for the school lunch program.

The group should then come together and discuss each goal. Each subcommittee should present its material and direct the attention of the group to the conditions which prevail in the lunchroom and to the standards discussed in the source material. A discussion of this material should bring out the reasons why things are as they are and should point to changes which might be desirable.

Recording the appraisal symbol

The leader of the group should be able to keep the discussion centered on each goal until the group is ready to designate an appraisal symbol. It is not necessary that *all* in the group agree in regard to the symbol decided on, but it is important that the majority agree on it and that the others be willing to accept the decision of the majority. This can be attained only when each person in the group has an opportunity to express his point of view on each item.

Attainment of goals should be indicated as follows:

E—EXCELLENT. Goal is reached to a satisfactory degree.

S—SUPERIOR. Goal is reached for the most part.

M—MEDIUM OR FAIR. Goal is reached to some extent.

D—INFERIOR. Goal is reached to a slight degree.

F—FAILURE OR VERY INFERIOR. Goal not attempted or attempted with no success.

N—Does not apply.

Appraisal Form for OPERATION OF THE SCHOOL LUNCH PROGRAM

The adequacy of the school lunch program in meeting the needs of the community is demonstrated by the serving of meals at school:

- A. To all pupils who do not go home for lunch.
- B. Without indication of discrimination between those pupils who pay for their lunch and those who get their lunch without cost to them.
- C. Consisting of foods that help meet the daily food requirements.
 A complete lunch at noon.
 Food other than a complete lunch at noon.
 Food other than at noon (supplementary feeding or breakfast or supper).
- D. Well-planned, well-cooked, and attractively served.
- E. Prepared and served under acceptable conditions.

APPRAISAL SYMBOL	
A	
B	
C	
D	
E	

GOALS	INFORMATION RECORDED		NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
A. Providing lunch and facilities for all pupils who do not go home for lunch.			
Number of pupils in the school_____			
Number of pupils who buy their lunch at school_____			
Number of pupils who receive lunch without cost to them_____			
Number of pupils who bring all their lunch from home_____			
Number of pupils who go home for lunch_____			
B. Serving lunch without indication of discrimination between those pupils who buy their lunch and those who get their lunch without cost to them.			
	Yes	No	
The same food served under the same conditions is made available to all pupils who eat the lunch prepared and served at school_____			
C. Serving meals consisting of foods that help meet the daily food requirements.			
A complete lunch at noon:			
Number of pupils who eat a complete noon lunch at school daily_____			
Number of teachers who eat a complete noon lunch at school daily_____			
Food other than a complete noon lunch at school:			
Number of pupils served an incomplete noon lunch at school daily_____			

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
C. Serving meals consisting of foods that help meet the daily food requirements. (Contd)		
A supplementary feeding or breakfast or supper:		
Number of pupils served—		
Midmorning and/or midafternoon feeding_____		
Breakfast_____		
Supper_____		
The total food served at school supplies ¹ (check)—		
Less than one-third of the pupil's daily food needs_____		
From one-third to one-half of his daily food needs_____		
More than one-half of his daily food needs_____		
D. Serving meals that are well-planned, well-cooked, and attractively served².		
Meals are well-planned when:		
Each meal consists of foods sufficient in kinds and amounts to contribute a suitable share of the day's food requirement_____		
All of the food served is not the same color_____		
The foods served have variety in texture_____		
Contrasting food flavors are used_____		
Variety in the preparation of the same food is secured_____		
Food preferences are recognized, but at the same time new dishes are introduced_____		
Meals are well-cooked when:		
The food is not undercooked_____		
The food is not overcooked_____		
The food is not scorched_____		
The food does not contain too much seasoning_____		
The food keeps its natural color and flavor and has a good texture_____		
Meals are attractively served when:		
All equipment used for serving or eating is arranged in an orderly and attractive way_____		
The plate does not contain different foods that run together_____		
The plate does not have food spilled over the edge_____		
The servings are not too large_____		
E. Meals prepared and served under acceptable conditions.		
The State and local health regulations regarding milk, other foods, and food handlers practiced are:		

¹The assistance of a trained person is necessary in making this evaluation.

²For detailed information see: *Meals for many*. Katherine W. Harris and Marion A. Wood. Cornell University, Extension Service Bulletin 477. 1942. 320 p. Ithaca, N. Y.

Menu-Planning Guide for School Lunches: Based on FDA Requirements for Type A and Type B Lunches. NFC-10. War Food Administration, Food Distribution Administration, Washington 25, D. C. 1943. 29 p.

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
E. Meals prepared and served under acceptable conditions. (Contd)		
The school lunchroom was inspected by _____ on _____ and the following recommendations were made in regard to the operation of the program:		

Habits of cleanliness and orderliness practiced by workers in:		
Preparation of food _____		
Serving of food _____		
Dishwashing _____		
Cleaning _____		
Personal hygiene and cleanliness practiced by workers:		
Appropriate and clean dress or apron _____		
Wear hair net or close fitting cap _____		
Wash hands frequently _____		
Keep fingernails clean _____		
Stay home if you have a cold or other indication of a communicable disease _____		

Record of Accomplishments

SOURCE MATERIALS ON OPERATION OF THE SCHOOL LUNCH PROGRAM

A. Providing lunch and facilities for all pupils who do not go home for lunch

In evaluating this goal, it should be recognized that some children live near the school and go home to adequate meals.

B. Serving lunch without indication of discrimination between those pupils who pay for their lunch and those who get their lunch without cost to them

Our present system of financing school lunch programs makes it necessary for those who are able to contribute to do so. However, evidence of discrimination between pupils who pay for their lunch and those who do not should not be permitted. Lack of discrimination is evinced when all pupils served have the same menus; have identical tickets, if tickets are used; sit together at tables; stand in the same line, if cafeteria service is used; and eat at the same hour.

C. Serving meals consisting of foods that help meet the daily food requirements

A complete lunch at noon.—A menu for a complete, well-rounded school lunch for each person served consists of the following foods:

Milk—at least $\frac{1}{2}$ pint.

Butter or fortified margarine.

Vegetables—Two, or a vegetable and a fruit.

Meat or fish or eggs or cheese or dry beans or dry peas or soybeans or peanut butter.

Whole-grain or enriched bread; or whole-grain or restored cereal.

A simple sweet is optional.

Foods other than a complete lunch at noon.—Meals served which regularly and continuously fail to meet the standard for a complete lunch should be classified as incomplete.

A supplementary feeding or breakfast or supper.—A supplementary feeding is food served to pupils at other than regular meal times, such as fruit, milk, or hot cereal served on arrival at school or midmorning or midafternoon.

In order to know the share of the pupil's daily food needs the school lunch contributes, it will be

necessary to know the kinds and amounts of foods which the pupil has had and will have at home and elsewhere during the day.

D. Serving meals that are well-planned, well-cooked, and attractively served

To insure that meals will be well planned, it is necessary to select foods from each of the major food groups: Milk; leafy, green, and yellow vegetables; tomatoes and citrus fruits; other vegetables and fruits; cereals, bread, and other cereal products, including enriched and restored kinds; meat, fish, poultry, eggs, cheese, dry beans, and peas; butter or fortified margarine. Sweets are optional.

Children will learn more readily to enjoy a variety of wholesome foods if the meals served are pleasing in combination of color, texture, and flavor. Repetition of color should be avoided insofar as possible.

Texture and consistency of foods are important factors in planning meals. There should be variety in texture of foods that are served together—soft, crisp, and firm. Because of their unpalatable consistency children often refuse thick pasty white sauces, stiff cornstarch puddings, and soups that are too thick or too thin. On the other hand, baked custard that has a jelly-like consistency is interesting to a child because it is both soft and firm. Very dry foods are often objectionable to children. For instance, a dry bread pudding would not be appealing while the same pudding served with a custard sauce might be very popular.

Contrasting food flavors make meals more appetizing to children. A meal composed entirely of mild-flavored foods lacks variety and zest. One containing too many strong-flavored foods usually will not appeal to the appetite. Repetition of flavors in a meal should be avoided. General food likes and dislikes should be considered when combining flavors. Foods that are generally popular should always accompany dishes which are not so well liked. This is an important factor in teaching children to like certain foods.

Even though the number of foodstuffs generally available for the school lunch is limited, variety in menus can be secured from day to day by combining the same foods in different types of dishes. The use of a different menu pattern each day in the week will help to assure variety. However, the same pattern, and particularly the same menu or the same dish, should not be used regularly on a certain day each week. Children lose interest in their meals and appetites are correspondingly less keen when they know in advance just what to expect on a given day.

Food preferences vary in different sections of the country and among different racial and nationality groups; and school lunch menus should be adapted accordingly in order to make them acceptable to the children. Menus should not be limited to familiar foods prepared in familiar ways, for a balanced diet is most easily achieved when it includes a wide variety of foods. Learning to like new dishes is important in building up good food habits and in assuring good nutrition.

E. Meals prepared and served under acceptable conditions

It is important that every effort be made to determine local and State regulations concerning the preparation and serving of meals to school children. Such regulations may be established by city councils or county or State health departments. Official representatives of such agencies should be encouraged to visit the school lunchroom and to assume responsibility for any necessary inspections. Pupils, teachers, and all workers should meet health standards. Workers who have colds should not be on duty.

Absolute cleanliness of person and clothing is essential for all food handlers and should be required of school lunch workers. A well-groomed appearance increases the self-confidence of the workers, helps them to develop a professional attitude toward their work, and presents them favorably to the public. The hair, which should be kept clean and neatly arranged, must be covered at all times by a close-fitting cap or by a net.

Suggested quantities of food per child per month (22 days) for adequate school lunches¹

Prepared by Bureau of Human Nutrition and Home Economics
Agricultural Research Administration—United States Department of Agriculture

Persons	Milk ²	Potatoes, sweet potatoes	Dry beans, peas, and nuts	Citrus fruit, tomatoes	Green and yellow vegetables	Other vegetables and fruit	Eggs	Meat, poultry, fish ³	Flour, cereals ⁴	Fats and oils ⁵	Sugars, sirups, preserves
	<i>Qt.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>	<i>No.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>	<i>Lb. Oz.</i>
4-6 years.....	8	1 9	0 3	2 6	2 6	2 6	8	1 9	2 2	0 6	0 9
7-12 years.....	8 $\frac{3}{4}$	2 15	0 3	2 6	2 6	4 0	8	2 12	3 1	0 12	0 10
13-15 years....	9 $\frac{1}{2}$	4 0	0 10	2 12	2 12	4 6	8	3 3	4 12	1 1	0 12
16-18 years....	8 $\frac{3}{4}$	4 4	0 13	2 12	2 12	4 6	8	3 3	5 9	1 2	0 12

¹Based on Bureau of Human Nutrition and Home Economics Family Food Plans for Good Nutrition. U. S. Department of Agriculture, AWI-78. The quantities given provide one-half of the day's allowance of milk; dry beans; citrus fruit and tomatoes; green and yellow vegetables; other vegetables and fruit; eggs; and meat, poultry, and fish; and one-third of the potatoes, cereals, sugars, and fats.

²Or its equivalent in cheese, evaporated milk, or dry milk.

³Excludes bacon and salt side.

⁴Count $1\frac{1}{2}$ pounds of bread as 1 pound of flour.

⁵Includes bacon and salt side.

Appraisal Form for MANAGEMENT OF THE SCHOOL LUNCH PROGRAM

Good organization and management of a school lunch program is demonstrated by:

- A. Effective and regular supervision.
- B. A definite plan of operation.
- C. A planned budget for the current year.

APPRAISAL SYMBOL	
A	
B	
C	

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
A. Effective and regular supervision. The supervisor is— A home economics teacher _____ Other teacher _____ Lunchroom manager employed for that purpose _____ Training (state briefly) _____ _____ Experience (state briefly) _____ _____ _____		
Is the supervisor considered a member of the school staff?		
State the amount of time per week which the supervisor devotes to—		
1. Supervision _____		
2. Preparation and serving of the school lunch _____		

B. A definite plan of operation.		
Is there an adequate plan for:	Yes No	By whom?
1. Menu making? _____		
2. Checking and ordering food and supplies? _____		
3. Keeping records? _____		
4. Work schedules for each worker? _____		
5. Posting work schedules? _____		
6. Food preparation? _____		
7. Serving? _____		
8. Dishwashing? _____		
9. Cleaning? _____		
10. Training workers? _____		

GOALS		INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
C. A planned budget for the current year.			
(NOTE: If accurate figures are not available enter estimates.)			
	Actual cost	Estimated cost	
1. Food cost per year_____			
2. Labor cost per year_____			
3. Utilities:			
Fuel cost per year_____			
Light cost per year_____			
Water cost per year_____			
4. Overhead:			
Depreciation cost_____			
Equipment replacement cost_____			
Other_____			
5. Unit cost per pupil lunch_____			
6. Food cost per pupil lunch_____			

Record of Accomplishments

SOURCE MATERIAL ON MANAGEMENT OF THE SCHOOL LUNCH PROGRAM

A. Effective and regular supervision

The services of a home economist at some level—State, district, county, or local—are important in the operation of an adequate school lunch program, at least on the basis of consultation, if not direct and constant supervision. It is recognized, of course, that in many schools the services of a home economist or other specially trained person may not be available for this purpose. However, since the success or value of the program will depend largely on the ability of the supervisor as a leader, the following general qualifications should be looked for in all supervisors regardless of the level of employment:

Ability to direct others as well as to follow directions.

Enthusiasm, initiative, and good judgment.

A pleasing personality and ability to establish and maintain harmonious working relationships with others.

Ability to meet emergencies with poise and self-confidence.

If supervision is given by a lunchroom manager and her training and/or experience is such that she is prepared to give effective supervision, including participation in the educational aspects of the school lunch program, she should be recognized as a member of the school staff.

B. A definite plan of operation³

Menus should be planned or checked by a technically qualified person. Home economics teachers, home demonstration agents, Farm Security home supervisors, or public health nutritionists are usually glad to give this assistance. School officials and teachers should recognize that it is the responsibility of the workers in a school lunch program to prepare and serve the menus as planned, not to cater to the whims of any individual. Modification should be made only when the foods required for the planned menus are not obtainable or other conditions make changes necessary. They should cooperate with the workers in seeing that plans are carried out and should not request changes in menus unless absolutely necessary. Where possible, all suggestions for changes in menus should be made in advance to the person responsible for the planning.

It is recommended that menus be planned for not less than 1 week or more than 2 weeks at a time. When detailed plans are made for longer periods of time numerous changes are likely to be necessary. Menus should be in the hands of the supervisor or other person responsible for the lunch at least 1 week in advance of the period during which they are to be used so that the necessary arrangements for delivery of food and supplies can be made.

The school lunch program should be run on a businesslike basis; therefore, provisions should be made for checking, ordering, and accounting for food and supplies and for basic records, such as time sheets for workers, copies of menus, cost sheets, and inventories of equipment.

The successful management of a school lunch is largely the responsibility of the supervisor or lunchroom manager. In order that the work may be efficiently organized and planned, it will be necessary for the supervisor to make a careful analysis of the jobs to be done. These jobs may be classified as daily, weekly, and occasional duties. After analyzing the jobs, work schedules should be prepared for each worker. The schedules should be simple and specific in order that workers may easily understand them and should be posted on a bulletin board in the workroom in typed form if possible.

As an outgrowth of the supervisor's or manager's careful planning and scheduling of jobs to be done, workers should develop an attitude of cooperative responsibility and should perform their jobs with punctuality, orderliness, cleanliness, and systematic routine. It will be possible to establish standards of work by giving accurate instructions to workers and by constantly training them on the job.

Food preparation plan.—Well-balanced menus and foods of good quality alone will not assure lunches of a high standard. Careful handling of food and proper methods of cooking are essential. Too much emphasis cannot be placed on the responsibility of the cook for preparing attractive and palatable school lunches. Indirectly she helps to establish good food habits. Children will learn

³For more detailed information see—School Lunch Management (U. S. Office of Education, Nutrition Education Series, Pamphlet No. 3), 32 p.

Handbook for Workers in School Lunch Programs With Special Reference to Volunteer Service. (Food Distribution Administration, U. S. Department of Agriculture, NFC-3.) 30 p.

to eat the proper food when it is appetizingly prepared. Success in cooking is the result of thoughtful and definite planning and care given to every detail.

Serving plan.—In serving school lunches, it should be kept in mind that the pupils will not wish to spend all of the lunch hour in eating, nor do school superintendents wish to use more time than the assigned lunch period for serving food. At the same time, if the service is regarded as an opportunity to teach good food habits and table manners, as it should be, enough time must be allowed so pupils will not feel rushed while eating. If these objectives are to be attained, careful, detailed plans for serving must be made with the school superintendent. When a large number of pupils are being served with limited facilities it will be necessary to schedule several serving periods. This plan of operation can be successful only when school authorities and lunchroom workers cooperate to the fullest extent.

Dishwashing plan.—Scrupulous cleanliness of dishes is required as a measure to prevent spread of infections. State and local departments of public health should be consulted concerning regulations for dishwashing in food handling establishments and the methods used should conform to those requirements as a necessary minimum. When it is necessary to wash dishes between serving periods, the same procedure should be followed as is used for dishwashing after the lunch hours.

A plentiful supply of hot water and soap is essential to proper dishwashing. Scouring powders, which should not be gritty, are needed for cleaning cooking utensils. If the water is hard, a water softener should be provided. After they are washed, dishes should be sterilized by an approved method.

Cleaning plan.—A definite daily and weekly plan for cleaning in an orderly manner all items of equipment and space should be made and strictly adhered to.

Training the workers.—In order that workers in the school lunchroom may be prepared to meet more successfully the specific problems encountered in their work, they should receive additional training for the particular job of preparing and serving lunches for school children. This training should be related to the abilities of the workers and to the requirements of their duties. If the training is

geared to a level beyond the grasp of the workers, it will not be applicable to their particular jobs. All workers need training in organizing their job.

C. A planned budget for the current year⁴

Before a school lunch is opened a planned budget should be developed which will assure adequate food, labor, space, utilities, equipment, and all other facilities necessary for the operation of the program *for the entire school year*. In order to do this it is necessary to know how many pupils are to be served; what foods and in what quantities they will be served; how many workers will need to be employed and what wages they will expect; and many other items concerning the amounts needed and the cost of fuel, light, water, equipment, etc.

Food cost.—The minimum cost of a complete lunch is determined by local food prices, market conditions, and the selections made. Much depends upon the ability of the person who does the buying. With constantly changing food situations, it is difficult to make an estimate as to minimum costs that will be generally applicable. Each school should keep accurate records of menus, number of meals served, and food costs, and at intervals should analyze these records to determine whether or not the best selections have been made in terms of money and food values.

Labor cost.—The number of workers needed for the preparation, serving, and cleaning will depend on a number of factors—the type of meal served, the ability of the cooks, the arrangement of work space and equipment, and the relationship of the work space to the serving space. In general, one worker should be able to prepare and serve a complete meal for a minimum of 25 to 30 pupils; two workers, 50 to 60 pupils; three workers, 75 to 90 pupils, when such workers are employed as much as 30 hours a week. For more than this number of pupils one worker should be added for each additional 50 pupils. The cost of labor will vary in different situations according to local conditions and the amount of paid and volunteer labor used.

Utility cost.—The other expenses—fuel, light, water, equipment replacement, and miscellaneous supplies—should not exceed 10 percent of the total.

⁴Ibid.

Appraisal Form for SCHOOL INTEREST AND PARTICIPATION

The school demonstrates its interest in, and support of, the school lunch program by:

- A. Providing assistance for its operation.
- B. Integrating it with the total school program.
- C. Assuming responsibility for its planning and supervision.
- D. Accepting the idea that the school lunch is a part of the total school program and should be supported by tax funds.
- E. Encouraging the pupils to participate actively in the program.

APPRAISAL SYMBOL	
A	
B	
C	
D	
E	

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
<p>A. The school board provides assistance for the operation of the school lunch.</p> <p>The school board appropriates a total of \$_____ for the operation of the school lunch program. This money is spent for:</p> <p>Full-time supervisor_____</p> <p>Part-time supervisor_____</p> <p>Paid workers to cook and/or serve_____</p> <p>Equipment_____</p> <p>Space_____</p> <p>Food_____</p> <p>Other facilities_____</p>		
<p>B. The school administrators and teachers integrate the school lunch with the total school program.</p> <p>The following methods are used:</p> <p><i>At the elementary school level</i>—relating the school lunch to the teaching of:</p> <p>Language arts (reading, language, spelling, hand-writing)_____</p> <p>Social studies (geography, history, civics, industrial arts)_____</p> <p>Fine arts (literature, art, music)_____</p> <p>Mathematics and science (arithmetic, health, nature, science)_____</p> <p>Physical education_____</p> <p><i>At the high-school level</i>—relating the school lunch to the teaching of:</p> <p>Science_____</p> <p>English_____</p>		

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
B. The school administrators and teachers integrate the school lunch with the total school program. (Contd)		
Mathematics_____		
History_____		
Language_____		
Home economics_____		
Agriculture_____		
Business education_____		
Other (specify)_____		
Using knowledge of food selection and eating habits of pupils for teaching and for constructive classroom discussion:		
Lunch brought from home_____		
Lunch selected at school_____		
Using feeding experiments with animals, conducted as a part of formal courses, to demonstrate the effect of different kinds and amounts of food eaten_____		
C. The school administrators and teachers participate in the planning, supervision, and operation of the school lunch.		
<i>Planning</i> —Determining—		
The number of pupils to be served_____		
Those children who are to get lunch without cost to them and those who are to buy lunch_____		
The amount to be charged for each lunch_____		
The school personnel available for lunchroom responsibilities_____		
The type of menu to be used_____		
The amount of time to be allowed for handwashing, toileting, and eating_____		
Other items_____		

<i>Supervision</i> —Using official time to—		
Supervise the workers_____		
Supervise the pupils while they are at the table_____		

<i>Operation</i>		
Purchasing food_____		
Cooking food_____		
Serving food_____		
Transporting food_____		
Other_____		

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
D. Acceptance by school officials of the idea that the school lunch is a part of the total school program and should be supported by tax funds. Enter reactions of: School board _____ _____ _____ _____ School administrators _____ _____ _____ _____ School teachers _____ _____ _____ _____ 		
E. Encouraging the pupils to participate actively in the program. Number of pupils who are members of the school lunch committee _____ Other participation by pupils _____ _____ Duties _____ _____ _____ _____ 		

Record of Accomplishments

SOURCE MATERIAL ON SCHOOL INTEREST AND PARTICIPATION

A. The school board provides assistance for the operation of the school lunch

In evaluating that part of the cost of the lunch-room paid by the school, consideration should be given to the school laws and to the amount of tax money available for such a program. Repairs, utilities, depreciation on space, and carpenter's or electrician's services paid by the school board should be considered as assistance.

B. The school administrators and teachers integrate the school lunch with the total school program

It is suggested that visits be made to the schools and to individual classes in order to discuss with teachers the amount and kind of integration present in the current school program.

Desirable habits in health, in food, and in study; family food customs; problems in democratic school living are all aspects of the school lunch. Children and young people can discuss these problems and can try to find practical solutions for them in their day-by-day work in social studies, language arts, fine arts, health, mathematics, and science, at both elementary and secondary school levels, and in agriculture and home economics in the high school.

The responsibilities all teachers take in connection with the school lunch program will vary. Any responsibilities carried by teachers should be a part of their official duties and on official time, and should be recognized in the planning of the load of each teacher who participates in the program.

Teachers and paid workers who are directly responsible for the school lunch program should learn what foods are being served in the homes and in the eating places in the community, so they can build on food habits already set up, and modify rather than completely change them. Classroom teachers will help to the degree that they recognize the school lunch as being an important part of the total school program in offering learning experiences for the pupils. Parents, too, should get this point of view through school and community discussion groups, and through visits to the school to observe and to have lunch with their children.

C. The school administrators and teachers participate in the planning, supervision, and operation of the school lunch

A full discussion of this subject with school administrators and teachers will be necessary before an evaluation can be made.

A child's food habits begin at birth to serve or to handicap him for the rest of his life. This means that parents, school administrators, teachers, and others should keep the following important questions in mind as they plan a school lunch program:

How long is the school day from the time the pupil leaves home until he is back again?

When, in relation to the morning and evening meals, should the school lunch be served?

What foods used in the school lunch will contribute a suitable share of the pupil's daily food requirement?

D. The school administrators and teachers accept the idea that the school lunch is a part of the total school program and should be supported by tax funds

The most persistent trend in school lunch programs at the present time includes the serving of school lunches as a regular part of the educational services to school children. More and more the public is recognizing that the school is responsible for factors which affect the physical well-being of the pupil as well as for factors which affect his mental development directly.

E. The school administrators and teachers encourage the pupils to participate actively in the program

The school lunch program is the concern not only of superintendent and principal, but of teachers, pupils, parents, and janitors as well. The degree to which all these persons have a part in planning, carrying out, and judging the school lunch program will determine whether or not it is successful. To create an interest in home, school, and community production and processing of foods essential to healthful diets is important in connection with a school lunch program.

Appraisal Form for COMMUNITY INTEREST AND PARTICIPATION

The community demonstrates its interest in, and support of, the school lunch program by:

- A A competent permanent committee actively working on the program and a plan for continuation of membership on the committee.
- B A planned interpretation program which functions effectively.
- C Financial assistance.
- D Volunteer assistance in the operation of the program.

APPRAISAL SYMBOL	
A	
B	
C	
D	

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
A. A competent permanent committee actively working on the program and a plan for continuation of membership on the committee. List names of advisory committee and organizations represented.		
State the plan for continuation of membership.		
List the general responsibilities of the advisory committee.		
The needs of the community regarding the school lunch program have been determined by the committee.		
If determined by a survey, enter the date on which the community survey was made.		

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
A. A competent permanent committee actively working on the program and a plan for continuation of membership on the committee. (Contd)		
Location of report or findings of committee		
Name of publication (if published)		
Conditions which were surveyed		
The needs of the community as determined by the survey have been interpreted to school officials by the committee		
The committee, or some member of the committee, is familiar with all State and local legislation and regulations affecting the school lunch program		
B. A planned interpretation program which functions effectively.		
List discussion groups, study programs, radio programs, newspaper releases, and other publicity relative to school lunch program.		
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		
9. _____		
10. _____		
Improvements or development of the school lunch program due to the above program. (Indicate relation by using a number corresponding to that used above).		

GOALS		INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
C. Financial assistance.			
List sources of funds and other resources contributed to the support of the school lunch program.			
Enter type and money value of contributions.			
		\$	
Total		\$	
D. Volunteer assistance in the operation of the program.			
List names and responsibilities of volunteer workers who assist in the operation of the program.			
<i>Name</i>	<i>Responsibility</i>	<i>Hours per week</i>	
Total			

Record of Accomplishments

SOURCE MATERIAL ON COMMUNITY INTEREST AND PARTICIPATION

A. Competent permanent committee actively working for the program and a plan for continuation of membership on the committee

A competent committee will be composed of citizens who have been selected on the basis of indicated interest, capacity for leadership, and influence in the community, working in close cooperation with school officials.

Representation should be secured from the major civic groups, such as women's clubs, men's organizations, nutrition councils, labor groups, and garden clubs. The greater the number of responsible citizens represented on the committee the greater will be the value of the committee to the school lunch program. Such a committee meets regularly, carries out a planned program, and coordinates the work of all groups actively interested in the school lunch program.

Some members of the school lunch committee should always be held over as members of the next year's committee, since only in this way can the plans and records for the program be continued on a uniform basis.

The major responsibilities of a school lunch committee should be to assist in planning the school lunch program; to interpret the program and its achievements to the communities; to solicit contributions; and to provide technical assistance, if members of the committee are qualified to perform such services.

The value of a school lunch program to a community is in direct proportion to the local need for such service. Therefore, in planning a program it is important to have specific information about local conditions in order to determine the extent and type of service to be given.

A study of the records of the committee should indicate specific improvements or developments of the school lunch program as a result of committee

activities. If the school lunch program has consistently improved and expanded over the period of operation, this should be indicative of the community's awareness of needs. "Improvements" should be interpreted to include improvements in type of meals served, in space and facilities for preparing and serving food, in personnel for operating all phases of the program. "Development" should embrace an extension of the program to an increased number of school children of all ages and to all racial groups.

B. A planned publicity program which functions effectively

A publicity program must be planned in order to be most effective. Some sequence in order of familiarity or interest in the school lunch program should be developed. Newspaper articles, radio speeches, subject matter for study clubs, talks, exhibits, and "visiting days" all are excellent means of arousing public interest in the program.

C. Financial assistance

In determining the extent of the contributions to the support of the school lunch program, a money value should be placed on all contributions, both in kind and in services, wherever possible. Community assistance (of whatever nature or kind) should be evaluated in relation to the ability of the citizens as a whole to contribute to such a program.

D. Volunteer assistance in the operation of the program

In evaluating the services rendered by volunteers, consideration should be given to the adequacy of such services. Work standards established for paid workers should be maintained by volunteers.

Appraisal Form for PHYSICAL FACILITIES

The adequacy of the facilities provided for preparation and serving of food is demonstrated by:

- A. Space—suited to its intended purpose, ample in size, safe, and sanitary.
- B. Equipment—suited to intended purposes, sufficient in quantity and of the type to permit efficient operation of the program, safe, and sanitary.
- C. Other facilities necessary for efficient, safe, and sanitary operation of the program.

APPRAISAL SYMBOL	
A	
B	
C	

GOALS		INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
A. Space—suited to its intended purpose, ample in size, safe, and sanitary. 1. Suited to its intended purpose: Amount of natural light available_____ Amount of artificial light available_____ Amount of ventilation available_____ Temperature of room_____ Type of heating facilities_____ Arrangement of the doors and windows as related to arrangement of equipment_____ Dimensions of room_____ Size of the room in relation to the amount of equipment_____ Size of the room in relation to the number of workers necessary to prepare and serve the meals, or pupils to be served at any one time_____ 2. Safety: Number of exits_____ Number of fire escapes_____ Number of fire extinguishers_____ Type of fire extinguishers_____ Type of building construction_____ Condition of building construction_____ Condition of heating facilities_____ Type of stove used in cooking_____ Condition of stove used in cooking_____ Condition of flue_____ Type of floor finish_____ Condition of floor finish_____	Kitchen	Serving area	

GOALS		INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
A. Space—suited to its intended purpose, ample in size, safe and sanitary. (Contd)		Serving area	
Kitchen			
3. Sanitation:			
Condition of walls, woodwork, and floors with regard to dampness, smoothness, and the ease with which they may be kept clean_____			
Presence of bugs, insects, rats, or mice_____			
Number of windows and doors without screens_____			
Type of screening used_____			
Size of mesh used_____			
Condition of screens_____			
4. Storage area:			
Location of storage area_____			
Condition of storage area_____			
Light_____			
Temperature_____			
Moisture_____			
Locks_____			
5. Dressing room for workers:			
A separate dressing room is provided_____			
Racks or hooks are provided_____			
Sanitary toilet facilities are available_____			
A wash basin away from the food preparation and serving area is available_____			
B. Equipment—suited to intended purposes, sufficient in quantity and of the type to permit efficient operation of the program, safe and sanitary.			
List of the equipment provided for the school lunch:			
Stove:			
Type of stove_____			
Number of burners, caps, or electric units_____			
Condition of stove_____			
Type of oven_____			
Size of oven_____			
Condition of oven_____			
Refrigerator:			
Number of refrigerators_____			
Type of refrigerators_____			
Size of refrigerators_____			
Condition of inside of refrigerator with regard to finish and ease of cleaning_____			
Average temperature maintained_____			

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
B. Equipment—suited to intended purposes, sufficient in quantity and of the type to permit efficient operation of the program, safe, and sanitary. (Contd)		
Table and counter space for food preparation and related work:		
Square feet in table surface space_____		
Type and condition of construction_____		
Height_____		
Width_____		
Type and condition of surface_____		
Accessibility_____		
Sinks:		
Number of sinks_____		
Type of sinks_____		
Cupboards:		
Number of cupboards_____		
Type of cupboards_____		
Size of cupboards_____		
Relation of cupboard space to equipment and supplies to be kept in them_____		
Cooking utensils:		
Miscellaneous small equipment (measuring utensils, beaters, cutlery, etc.).		
To be considered in relation to the amount and kind of food to be prepared:		
Type_____		
Condition_____		
Cleaning equipment:		
To be considered in relation to the amount and type of cleaning to be done:		
Number_____		
Size_____		
Type_____		
Dishwashing equipment:		
To be considered in relation to the number of dishes to be washed:		
Number of sink compartments or pans_____		
Size of sink compartments or pans_____		
Number of drain baskets for holding dishes_____		
Type of materials for dishwashing_____		
Type of equipment and materials for sterilizing_____		
Amount of drainboard space_____		
Number of dish cloths and towels_____		
Type and capacity of dishwashing machines_____		
Condition of dishwashing machine_____		

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
B. Equipment—suited to intended purposes, sufficient in quantity and of the type to permit efficient operation of the program, safe, and sanitary. (Contd) Disposal equipment: Number of containers for garbage_____ Type of containers for garbage_____ Size of containers for garbage_____ Number of containers for waste_____ Type of containers for waste_____ Size of containers for waste_____ Serving equipment: To be considered in relation to the amount of food to be served and type of service: Number and size of tables or shelves_____ Number and type of serving utensils_____ Number of steam tables_____ Number of refrigeration units_____ Number of trays_____ Lunchroom equipment: To be considered in relation to the pupils to be served: Number of seats available_____ Amount of table or desk space_____ Height of chairs or benches_____ Height of tables_____ Type and condition of construction of chairs and tables_____ Number of plates_____ Number of bowls_____ Number of cups or tumblers_____ Number of forks_____ Number of teaspoons_____ Type and condition of tableware_____ Number and kind of napkins provided daily_____		
C. Other facilities necessary for efficient, safe, and sanitary operation of the program. Water: Date on which water was tested and approved_____ Date on which water will be tested in future_____ Type of water container available (if not running water)_____ Provision for continuous hot water_____ Provision for drinking water facilities_____ Garbage and waste disposal: Method of disposal_____		

GOALS	INFORMATION RECORDED	NEXT STEP TO BE TAKEN TO IMPROVE CONDITIONS
C. Other facilities necessary for efficient, safe, and sanitary operation of the program. (Contd)		
By whom_____		
Number of days weekly on which garbage is disposed of_____		
Number of days weekly on which waste is disposed of_____		
Handwashing facilities for pupils: To be considered in relation to the number of pupils participating:		
Number of wash stands (wash pans) available _____		
Number of towels provided each day_____		
Kind of water (hot or cold) provided for hand- washing_____		
Type of soap provided_____		

Record of Accomplishments

SOURCE MATERIAL ON PHYSICAL FACILITIES

A. Space—Suited to its intended purpose, ample in size, safe and sanitary

The space provided for a school lunch should be such that food may be prepared and served in an orderly and efficient manner under safe conditions. Certain minimum standards are necessary to obtain this objective. The space should be inspected by proper officials and approved at regular intervals.

In considering whether space is suited to its intended purpose, ample in size, safe, and sanitary, consideration should be given to the following standards:

Light.—Lighting which will enable workers to do all their required tasks without eyestrain is essential. Natural light is desirable but even a room with good natural light will require supplementary artificial lighting for dark days, particularly over the food preparation and cooking areas. Electric lights of the semi-indirect type placed to give even light in all parts of the room are preferred. If this standard cannot be met, the best available type of lighting which will meet safety requirements should be used.

Ventilation.—Space provided for the school lunch should be well ventilated. It is desirable to have windows on two or more sides of the room to provide cross ventilation. Windows should open from both top and bottom. If window space is not sufficient for good ventilation, electric fans are recommended to increase the circulation of air. The school lunch should not be located in rooms which have no opening to the outside, except in buildings equipped with adequate ventilating systems.

Heat.—Heating should be provided which will maintain a comfortable temperature during the entire day, so that it will not be necessary for workers to wear sweaters, coats, rubbers, or overshoes in the kitchen or for pupils to wear their wraps while eating lunch. Thermostat controlled furnace heat is desirable. A wood or coal range, to be used for both cooking and heating, is a minimum.

Arrangement.—Equipment should be so arranged that workers can perform the necessary tasks with the maximum efficiency. The lines of travel for each worker should not interfere

with those of others who are working. The placement of the equipment should be such that (1) there is adequate light for all work to be done; (2) cleaning can be easily and well done; (3) preparation areas are well located in relation to storage room and stove; and (4) serving areas are close to the room in which the food is to be served.

Size.—The amount of space required for a school lunch will necessarily depend on the number of lunches to be prepared and the equipment to be used. It must be adequate to provide sufficient areas of work for all activities—receiving and storing supplies; preparing and cooking food; serving the meal; washing the dishes. Space where workers may hang their street clothes and change into their uniforms is another essential. Toilet and lavatory facilities for the workers must also be provided convenient to the kitchen.

Food preparation, cooking, and clean-up area.—A separate kitchen which can be arranged with convenient areas for food preparation, cooking, and dishwashing is desirable.

Part of a room providing adequate space for the satisfactory performance of this work is the minimum requirement.

The foods laboratory of a school sometimes serves as a school lunch kitchen, but such an arrangement should not be permitted when the laboratory is used for classes at the time the lunch is being prepared.

Serving area.—A separate room, convenient to the kitchen, is desirable for serving the school lunch. If it is necessary to serve the lunch in the same room in which food is prepared, the space farthest from stove and sink should be used for that purpose. Sufficient space to provide for seating the pupils at the tables is required. Meals may be served in classrooms at the desks of pupils or study tables when no other space is available.

Storage area.—Safe and convenient storage space should be provided for all equipment and supplies. There should be a table or box as near to the storage area as possible, to receive supplies as they are delivered to the unit.

The preferred type of storage space for food supplies is a separate room convenient to the kitchen. It should be dry, well-ventilated, adequately lighted, and kept at cool but not freezing temperature. It should have shelves, bins, and racks, raised several inches from the floor, to provide for proper storage of all items. The door should have a lock. Refrigeration for butter and other perishables received in considerable quantities is highly desirable.

A minimum standard for storage space would require adequate shelves, bins, and racks in the kitchen or other available place conveniently located. Such storage space should be enclosed and equipped with locks.

Storage closets for cooking utensils and supplies used daily should preferably be located in the kitchen.

Dressing room.—The ideal dressing room for workers is a separate room with adjoining lavatory and toilet. It should be equipped with clothes rod or hooks and hangers, a shelf or rack for hats, a rack for shoes, a dressing table, and a mirror.

As a minimum, a section of a room other than one in which food is handled should be set aside for the use of the workers. The space should be screened or curtained for privacy, and hooks or racks should be provided for hanging street clothes. If it is impossible to provide a separate toilet for the workers, they must have access to one which is kept in a sanitary condition. In a building without lavatory facilities, a wash basin should be arranged on a table or box away from the food preparation and serving areas.

Safety.—The space should be inspected by proper officials and approved at regular intervals.

Sanitation.—Cleanliness and sanitation are essential to protect the health of the pupils and the workers and to prevent food spoilage.

Walls and ceiling.—A smooth, non-absorbent, washable finish which is easily cleaned is desirable. A clean whitewashed wall with oil-cloth above the sink is acceptable as a minimum.

Woodwork.—A smooth washable finish is preferred. The minimum requirement is unfinished woodwork sufficiently smooth to be kept clean.

Floors.—Floors should be smooth, non-absorbent, easy to keep clean, durable, and resilient so that workers standing on them will not tire easily. A minimum standard requires a floor which is reasonably smooth and possible to keep clean. With cement floors, rubber mats or wooden platforms should be provided at tables, sinks, and other work centers for the comfort of the workers.

B. Equipment—Suited to intended purposes, sufficient in quantity and of the type to permit efficient operation of the program, safe and sanitary

Stoves.—The stove should provide sufficient space for efficient preparation of the types of dishes to be included on the menus. Gas or electric stoves with temperature-controlled ovens are desirable, but kerosene, wood, or coal ranges in good working condition are acceptable. As a minimum, a 2-burner stove with portable oven should be required. For large units and for central kitchens serving a large number of schools, institutional type ranges, baking ovens, and steam-jacketed kettles are desirable.

Refrigerators.—A well-insulated refrigerator, with porcelain enamel finish inside and out is desirable. It may be either iced or mechanically cooled. A well-built, wooden refrigerator, adequately insulated to maintain a temperature of 40-45 degrees is acceptable.

Work tables.—Work tables should be substantial in construction with smoothly finished non-absorbent tops. They should be of a height which will permit proper posture of workers. Linoleum, stain-resistant metal, and hard wood with water-proof finish make good working surfaces. Work tables on rollers or castors facilitate the moving of food and supplies both in preparation and serving.

Sinks.—It is desirable that school lunch units be equipped with separate sinks for dish washing and for washing vegetables, with a hopper for washing mops and other cleaning equipment, and with means of disposing of water used for cleaning purposes. Double or triple sinks are convenient for dishwashing. If only one sink is available, separate pans should be provided for washing dishes and vegetables. Stainless metal

or porcelain enamel sinks are preferred. Other satisfactory materials are iron and soapstone. Sinks should be installed at a height to permit working without stooping.

Cupboards.—A minimum standard for storage space requires shelves, bins, and racks—in the kitchen or other available place conveniently located—adequate for the items to be stored. Such storage space should be enclosed and equipped with locks. Cupboards for cooking utensils and supplies used daily should preferably be located in the kitchen.

Equipment for cooking and for cleaning.—Steel or heavy aluminum kettles and saucepans are safest and most desirable. Enamel ware, especially inexpensive types, is not a good investment, as it chips and must be replaced frequently. If it is used, extreme care must be taken to prevent bits of enamel from getting into the food. Iron is a satisfactory material for frying pans and Dutch ovens.

Following is a list of minimum equipment needed to carry on food preparation, and cooking activities:

Stove	Can opener
Work tables	Large fork
Stool for worker	Clock
Cupboard or cabinet for supplies	Vegetable brush
Covered container for supplies	Wire egg beater
Accurate measuring utensils	Wire strainer
Mixing bowls, assorted sizes	Covered cooking utensils, large enough for required number of servings.
Mixing spoons, preferably wooden	Tea kettle
Tablespoons	Colander
Teaspoons for tasting	Baking pans
Butcher knife, paring knife	Hot pan holders
	Dish pans
	Dish cloths
	Dish towels
	Dish drainer

Following is a list of minimum equipment needed to carry on cleaning activities:

Cleaning cloths	Towel rack or clothes line
Broom, dust pan	Garbage and trash containers
Mop, mop pail	

Disposal equipment.—Garbage and trash should be kept in covered, water-tight metal containers. It is the school's responsibility to remove garbage and trash from the lunchroom daily and

dispose of it in accordance with local health department regulations. Garbage cans should be washed and scalded daily.

Serving equipment.—For convenient serving, tables large enough to hold the kettles or pans of cooked food and the dishes to be filled are needed. In a small school the work table may be cleared at serving time and used for this purpose, if a separate table cannot be provided.

Serving utensils include ladles for soups and stews, serving spoons for vegetables and desserts, and pitchers for beverages. A pitcher is also convenient for serving soups which pour easily. Serving trays should be provided for carrying the filled dishes to the tables. These should be strong, light in weight, and of a material which will not buckle.

For cafeteria service a long counter, table, or series of tables providing sufficient space for an orderly arrangement of food and dishes is necessary. Steam tables for keeping food hot during the serving period are desirable when the number of pupils served is large. If this equipment is not possible, cooling may be retarded by setting kettles of food in containers of hot water.

Cafeteria service requires the use of individual trays, adequate in size for holding a plate, a glass, a dessert dish, and other dishes commonly used for the school lunch.

Lunchroom equipment.—Since one's attitude toward food is influenced by the conditions under which it is eaten, the lunchroom should be made as attractive and comfortable as possible. Crisp curtains, flowers and plants, pictures and posters will help make the room cheerful and inviting.

Arrangements should be made to insure that chair and table space is available for each pupil while eating. If no other provision for seating is possible, the pupils may sit at their desks in the classrooms.

Chairs (or benches which may be used in place of chairs if necessary) and tables should be of a height that will enable the pupils to eat their lunches in comfort. They should be able to sit well back in their chairs with their feet touching the floor, and to use their hands freely above the table top. When pupils of all school grades are served, it is desirable to have chairs and tables of three different heights.

C. Other facilities necessary for efficient, safe, and sanitary operation of the program

Water supply.—A safe water supply is essential for every school lunch program. If the water comes from a community supply which is regularly tested, it is unnecessary to request a special test before using it.

Hot and cold running water in the kitchen and cold running water in the lunchroom are highly desirable. The minimum requirement is an adequate supply of safe water on or very near the

premises. Covered containers should be provided for carrying the water from the source. Water should not be allowed to stand in the kitchen in uncovered containers. A covered barrel or tank with spigot for drawing the water is required for storage of water. This container should be drained, thoroughly cleaned, and sterilized at least once a week.

A sanitary drinking fountain or paper cups for drinking water should be provided for the workers. The use of a common dipper, cup, or glass should not be considered.

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